

## CLAIMS

### WHAT IS CLAIMED IS:

1. An apparatus for generating a voice quality score within a communication system comprising a voice analysis platform that generates a reference speech sample for transmission into said communication system, said voice analysis platform provides configuration data to instruct at least one signal processing device to provide at least one output of said reference speech sample at a signal processing point within said at least one signal processing device, and said voice analysis platform generates at least one voice quality score based on said at least one output.
2. The apparatus of Claim 1 further comprising a display to provide a graphical diagram of said communication system indicating said at least one voice quality score.
3. The apparatus of Claim 2 wherein said graphical diagram graphically associates said at least one voice quality score with said at least one output.
4. The apparatus of Claim 1 comprising at least one communication software, wherein said at least one communication software comprises a server version of said communication software.
5. The apparatus of Claim 1 comprising at least one communication software, wherein said at least one communication software comprises a client version of said communication software.
6. The apparatus of Claim 1 wherein said voice analysis platform is configured to transmit and receive said at least one reference speech sample.
7. The apparatus of Claim 1 wherein said at least one signal processing device comprises a voice over IP gateway.

8. The apparatus of Claim 1 wherein said at least one signal processing device stores and executes a software capable of communicating said configuration data with at least one communication software of said voice analysis platform.

9. An apparatus for generating a voice quality score within a communication system comprising at least a first voice analysis platform configured to transmit said at least one reference speech sample and at least a second voice analysis platform configured to receive said at least one reference speech sample.

10. An apparatus for generating a voice quality score within a communication system comprising:

at least a first voice analysis platform capable of generating and transmitting a reference speech sample; and

at least a second voice analysis platform capable of receiving said reference speech sample, wherein said at least first voice analysis platform or said at least second voice analysis platform analyzes at least one output of said reference speech sample provided at a signal processing point within a signal processing device of said communication system.

11. A method of assessing voice quality of a communication system comprising:

transmitting reference speech samples into said communication system;

receiving said reference speech samples captured at one or more outputs of a signal processing element of a gateway within said communication system; and

determining voice quality scores based on said captured reference speech samples.

12. The method of Claim 11 further comprising displaying said voice quality scores graphically.

13. The method of Claim 12 wherein said displaying occurs by way of a graphical user interface.

14. The method of Claim 11 further comprising determining said one or more outputs of a signal processing element of a gateway within said communication system in which to capture said reference speech samples.
15. The method of Claim 11 further comprising determining and displaying statistical information related to said voice quality scores.
16. The method of Claim 15 wherein said statistical information comprises an average voice quality score and a variance.
17. The method of Claim 11, wherein said gateway comprises a voice over IP gateway.
18. A method of generating voice quality scores of a communication system comprising:  
transmitting a reference speech sample into said communication system; and  
receiving said reference speech sample captured as an output of a signal processing element of a signal processing device within said communication system.